Medline's VAPrevent & Oral Care Kits: Reducing the Risk of Ventilator-Associated Pneumonia

5 Million Lives Campaign

JCAHO

SCIP

References
1. Centers for Disease Control. Guidelines for preventing healthcare-associated pneumonia. MMWR.
2003:52 (RR-51).
February 24, 2008.
5. Vollman K. Ventilator-associated pneumonia and pressure ulcer prevention as targets for quality
2007 January: 8(1).

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Achieving Excellence in Patient Care

Three Important National Initiatives

Joint Commission’s 2008 National Patient Safety Goals for Hospitals

• Improve the accuracy of patient identification.
• Improve the effectiveness of communication among caregivers.
• Improve the safety of using medications.
• Reduce the risk of health care-associated infections.
• Prevent healthcare-associated pressure ulcers
• Reduce the risk of surgical fires
• Reduce the risk of patient harm resulting from fires
• Reduce the risk of influenza and pneumococcal disease through immunization
• Identify safety risks inherent in the patient population
• Rapid response to changes in patient condition
• Implementation of Universal Protocol for preventing wrong-site, wrong-person, wrong-procedure surgery

Surgical Care Improvement Project (SCIP): Target Areas

1. Surgical site infections
   • Antibiotics, blood sugar control, hair removal, normothermia
2. Perioperative cardiac events
   • Use of perioperative beta-blockers
3. Venous thromboembolism
   • Use of appropriate prophylaxis
4. Respiratory Complications
   • Prevention of healthcare-associated post-operative pneumonia and ventilator-associated pneumonia through rapid weaning protocol, PUD prophylaxis and other medical interventions

Protecting Five Million Lives from Harm Campaign: Twelve Interventions

• Prevent Pressure Ulcers
• Reduce Methicillin-Resistant Staphylococcus Aureus (MRSA) Infection
• Prevent Harm from High-Alert Medications
• Reduce Surgical Complications
• Deliver Reliable, Evidence-Based Care for Congestive Heart Failure
• Get Boards on Board
• Deploy Rapid Response Teams
• Prevent Adverse Drug Events
• Improve Care for Acute Myocardial Infarction
• Prevent Surgical Site Infection
• Prevent Central Line-Associated Bloodstream Infection
• Prevent Ventilator-Associated Pneumonia
  • Head of bed elevated
  • Daily assessment
  • PUD prophylaxis
  • DVT prophylaxis

Protecting Five Million Lives from Harm Campaign: Twelve Interventions

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  • PUD prophylaxis
  • DVT prophylaxis
Bioténe® and Oralbalance® Represent Innovative and More Beneficial Options for Oral Care

Bioténe® and Oralbalance® have been available over the counter for more than 20 years and are now available to the healthcare community. Oralbalance® contains lactoperoxidase, lactoferrin and lysozyme, natural enzymes that are essential components of saliva. These enzymes work together as a system to generate a constant flow of OSCN– ions (hypothiocyanite), a part of our host defense system.

Bioténe® and Oralbalance® are Recognized Products
- Voted #1 by dentists in the June 2004 Dental Economics Survey
- Voted #1 in the RDH Dental Hygiene Profile Survey for the past nine years
- Recommended by the Oral Cancer Foundation

Bioténe® and Oralbalance® Providing Patients with a Safer, Gentler Option
- Bioténe® and Oralbalance® contain no petroleum distillates making them safe for use with patients on oxygen
- Designed for long-term use – ideal for the long-term acute, nursing home, oncology, and hospice patient
- Can be ingested (in limited quantities) and will not cause irritation of the oral cavity or yeast infections,
- No contraindications for use in conjunction with CHG on cardiac surgical patients (during the perioperative period)
- Sweetened with Xylitol®, a natural fruit sugar extensively reviewed in literature, making both Bioténe and Oralbalance® well tolerated by diabetics.
- Oralbalance’s® non-drying formula helps protect the oral mucosa from the discomfort and irritation caused by dry-mouth (xerostomia) and mouth breathing.
Help Protect Your Patients with Oral Care While Restoring the Host Defense System

The strength of Oralbalance® lies in its ingredients: it contains three enzymes and one protein found naturally in human saliva. The mouth’s natural protective system emanates from three pairs of salivary glands. If the amount of saliva and naturally occurring enzymes is altered for any reason, the balance of the glucose oxidase and lactoperoxidase mechanism is disrupted. Help your patients recreate the natural enzyme balance with Oralbalance® and other oral care products from Medline.

For further information on the glucose oxidase and lactoperoxidase system and its role in the host defense system, contact your Medline representative and visit the Laclede website at www.laclede.com.
POLICY
1. An oral peripheral examination is performed upon admission and daily thereafter by a registered nurse.
2. Patients with altered levels of consciousness or intubated patients are provided oral care every two to four hours.
3. Intubated patients will be deep suctioned to remove oropharyngeal secretions every six to eight hours as well as prior to repositioning the tube or deflation of the cuff.

PROCEDURE
1. Set up suction equipment.
2. Discuss procedure with patient and/or family, identifying purpose of oral care and goals to be achieved.
3. Raise the head of the bed or place patient in a semi-Fowler’s position.
4. Deep suction intubated patients using the oropharyngeal catheter as needed to remove oropharyngeal secretions from the top of the insufflation cuff, the pyriform sinuses and the epiglottis.
5. Use the yankauer to remove debris and copious secretions (note: the yankauer is not a “cleaning tool.” Oral hygiene is provided using the suction swab and suction toothbrush only).
6. Place mouthwash in “built-in” medicine cup. With suction off, place suction toothbrush in mouthwash to saturate.
7. Brush teeth gently using suction toothbrush and recommended mouthwash.
   7.1 Brush for approximately one to two minutes.
   7.2 Exert gentle pressure while moving in short horizontal or circular strokes.
8. Gently brush the surface of the tongue, the teeth and gingiva.
9. Use suction swab to clean the teeth and tongue if brushing causes discomfort or bleeding.
   9.1 Place swab perpendicular to gum line, applying gentle mechanical action for one to two minutes.
   9.2 Turn swab in clockwise rotation to remove mucous and debris. If oral cavity has especially copious debris, lightly coat oral cavity with mouth moisturizer to soften debris. Wait five minutes and continue oral care.
   9.3 Use additional oral swabs to remove excessive debris from the oral cavity as debris can clog vacuum lines.
10. Apply mouth moisturizer to the oral mucosa using an oral swab.
11. Apply non-petroleum-based lip balm if needed.
12. Document provision of oral care in patient chart including oral peripheral findings, type of oral care provided and time of intervention.
## COMPETENCY STATEMENT & VALIDATION TOOL

### COMPETENCY: COMPREHENSIVE ORAL HYGIENE

<table>
<thead>
<tr>
<th>COMPETENCY STATEMENT</th>
<th>MEASURABLE CRITERIA</th>
<th>RATIONALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform a daily oral assessment to evaluate the level of oral dysfunction and provide the most appropriate care.</td>
<td>Document the daily oral assessment in the patient’s record and utilize an oral peripheral patient care assessment tool to accurately evaluate the oropharyngeal cavity.</td>
<td>Prevent complications arising from at-risk oral mucosa.</td>
</tr>
<tr>
<td>Brush the patient’s teeth at a frequency of every two to four hours and as needed to prevent the formation of plaque.</td>
<td>Utilize a soft suction toothbrush with a compact head to maneuver around the ET tube. Use an oral swab for stimulation of mucosal tissue.</td>
<td>Plaque buildup can become a reservoir for respiratory pathogens.</td>
</tr>
<tr>
<td>Rinse the patient’s mouth with an alcohol-free oral rinse following brushing.</td>
<td>Utilize a non-irritating oral rinse for oral cleansing. Choose one proven to reduce respiratory pathogens, restore natural balance and fight bacteria.</td>
<td>To prevent bacterial colonization of the oropharyngeal region.</td>
</tr>
<tr>
<td>Suction oral secretions in both the oral cavity and the oropharyngeal area.</td>
<td>Utilize a soft-tipped yankauer for non-traumatic oral suctioning and a deep suction catheter for suctioning secretions in the oropharynx, the pyriform sinuses and above the insufflation cuff.</td>
<td>To prevent the aspiration of microorganisms.</td>
</tr>
<tr>
<td>Apply water-based mouth moisturizer as needed.</td>
<td>Document any lesions found during the assessment and use a water-based mouth moisturizer to improve the healing of lesions.</td>
<td>To maintain the integrity of the oral mucosa.</td>
</tr>
<tr>
<td>Comprehensive Oral Hygiene Procedure</td>
<td>Needs Practice</td>
<td>Competency Met</td>
</tr>
<tr>
<td>--------------------------------------</td>
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<td>----------------</td>
</tr>
<tr>
<td>1. Wash hands</td>
<td></td>
<td></td>
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<tr>
<td>2. Assemble equipment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Assessment form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Oral care kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Dedicated suction equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Identify patient by ID bracelet</td>
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<td></td>
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<tr>
<td>4. Raise the bed to working height.</td>
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<tr>
<td>5. Lower side rail on NEAR side.</td>
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<td></td>
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<tr>
<td>6. Educate patient/family regarding diagnosis and procedure.</td>
<td></td>
<td></td>
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<tr>
<td>7. Don disposable gloves.</td>
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<td></td>
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<tr>
<td>9. Establish a Q2 hour to Q4 hour oral hygiene schedule according to patient assessment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Set up suction equipment.</td>
<td></td>
<td></td>
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<tr>
<td>11. Position the patient's head to the side or place in semi-Fowler's position.</td>
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<tr>
<td>12. Provide deep suction as needed in intubated patients to remove oropharyngeal secretions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Brush teeth using suction toothbrush and small amounts of alcohol-free mouthwash. Brush for approximately one to two minutes. Exert gentle pressure while moving in short horizontal or circular strokes.</td>
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</tr>
<tr>
<td>13. Gently brush the surface of the tongue.</td>
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<td></td>
</tr>
<tr>
<td>16. Rinse the patient's mouth with an alcohol-free oral rinse following brushing.</td>
<td></td>
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</tr>
</tbody>
</table>
| 17. Use a suction swab to clean teeth, tongue and hard palate if brushing causes discomfort or bleeding:  
  • Place swab perpendicular to gum line, applying gentle mechanical action for one to two minutes.  
  • Turn swab in clockwise rotation to remove mucous and debris | | |
| 18. Suction the oropharyngeal cavity with yankauer and/or suction catheter. | | |
| 19. Apply mouth moisturizer inside mouth. | | |
| 20. Apply lip balm if needed.         |                |                |
| 21. Reposition patient and raise side rail, lower bed. | | |
| 22. Dispose of equipment.             |                |                |
| 23. Accurately document procedure:    |                |                |
|   a. Oral care procedure             |                |                |
|   b. How patient tolerated procedure |                |                |
| 24. Before leaving room, assess environment for safety | | |
ORAL PERIPHERAL PATIENT EVALUATION

Patient Name:__________________________________      Diagnosis:__________________________________
DOB:____________      Admission Date:____________     Pt Number:____________

A. Patient/family goal (document what family/patient have for goals relative to current status)
______________________________________________________________________________________________________

B. Patient/family education regarding patient status_________________________________________________________

C. Orientation: WNL_____  Self_____  DOW_____  MOY_____  Year_____  Date_____

D. Facial Symmetry:  Yes_____  No_____  Frown?_____       Laterality:  L_____  R_____  WNL

E. Lips:  Retraction_____  Smile_____  Pucker_____  N/A_____

F. Tongue:  Protrude (midline? L/R deviation?)__________  Fasciculations__________

G. Teeth:  Edentulous__________  Loose/missing teeth__________  Erosion of molars__________

H. Swallow reflex – on command?__________  Present/absent swallow reflex? (Reflexive swallows occur every
30-40 seconds, longer intervals may indicate dysphagia. Gag reflex presence/absence does not indicate level
of oral dysfunction)____________________________________________________________________________________

DIRECTIONS: Rate each category, sum ratings and implement interventions based on total score.

<table>
<thead>
<tr>
<th>Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lips</td>
<td>Smooth, pink, moist and intact</td>
<td>Slightly wrinkled and dry; one or more isolated, redened areas</td>
<td>Dry and somewhat swollen; may have one or two isolated blisters; inflammatory line of demarcation</td>
<td>Extremely dry and edematous; entire lip inflamed; generalized blisters or ulcerations</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Gingiva and oral mucosa</td>
<td>Smooth, pink, moist and intact</td>
<td>Pale and slightly dry; one or two isolated lesions, blisters or redened areas</td>
<td>Dry and somewhat swollen; generalized redness; more than two isolated lesions, blisters or redened areas</td>
<td>Extremely dry and edematous; entire mucosa very red and inflamed; multiple confluent ulcers</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Tongue</td>
<td>Smooth, pink, moist and intact</td>
<td>Slightly dry; one or two isolated reddened areas; papillae prominent, particularly at base</td>
<td>Dry and somewhat swollen; generalized redness but tip and papillae are redder; one or two isolated lesions blisters Should this be one or two isolated lesions or blisters?</td>
<td>Extremely dry and edematous; thick and engorged; entire tongue quite inflamed; tip very red and demarcated with coating; multiple blisters and ulcers</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Teeth</td>
<td>Clean; no debris</td>
<td>Minimal debris; mostly between teeth</td>
<td>Moderate debris clinging to half of the visible enamel</td>
<td>Covered with debris</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Saliva</td>
<td>Thin, watery, plentiful</td>
<td>Increased in amount</td>
<td>Scant; might be thicker than normal</td>
<td>Thick and ropy, viscid or mucoid</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
Recommendations are as follows:

_____ Score of 5 --WITHIN FUNCTIONAL LIMITS, but at possible risk for alteration in integrity, function or comfort of oral cavity

1. Perform oral assessment on admission and once daily.
2. Remove and brush dentures twice daily (same times as oral care).
3. Perform oral care four times daily (after meals, at bedtime).
4. Use soft toothbrush and mouthwash and/or toothpaste to clean teeth, gums and entire oral mucosa.
   For patients requiring suction, use suction swabs or suction brushes.
5. Rinse with mouthwash or water.
6. Apply mouth moisturizing gel to lips and oral mucosa to lubricate and moisturize (after oral care and when needed).

_____ Score of 6 to 10 MILD DYSFUNCTION of integrity, function or comfort of oral cavity.

1. Perform oral assessment on admission and twice daily (a.m. and p.m.).
2. Remove and brush dentures twice daily (same times as oral care); leave dentures out if irritating.
3. Perform oral care six to 12 times daily.
4. Use soft toothbrush and toothpaste to clean teeth, gums and entire oral mucosa. If painful or at risk of bleeding, use oral swabs. For patients requiring suction, use suction swabs or suction brushes.
5. Rinse with mouthwash or water.
6. Apply mouth moisturizing gel to lips and oral mucosa (do frequently; after oral care and four times daily minimum).

_____ Score of 11 to 20 MODERATE/SEVERE DYSFUNCTION of integrity, function or comfort of oral cavity

1. Perform oral assessment on admission and three times daily.
2. Remove dentures (and leave out).
3. Perform oral care 12 times daily.
4. Use oral swabs and mouthwash to clean teeth, gums and entire oral mucosa. For patients requiring suction, use suction swabs or suction brushes.
5. Rinse with mouthwash or water.
6. Apply mouth moisturizing gel to lips and oral mucosa to lubricate and moisturize (every one to two hours; after oral care and as needed).

Goals:
1. Provide daily patient and family education regarding the need and purpose for oral care.
2. Perform oral care based on level of severity noted above, monitoring for breakdown of the oral mucosa.
3. __________________________________________________________________________
4. __________________________________________________________________________
5. __________________________________________________________________________


Note: Use Universal Precautions during oral assessment and intervention. With all oral care, be especially cautious to prevent aspiration with patients who demonstrate over 30 seconds between reflexive swallows or a compromised gag reflex. If assessment determines a potential need for cultures, protective agents, topical anesthetics or medications, consult a physician.
FREQUENT ORAL CARE IS IMPORTANT

Your 2 hour VAPrevent kit contains everything you need for 1 patient for a 24 hour period based on a Q2 oral care protocol:

1 setup kit (1 y-connector, 1 on/off turn-valve, 1 covered yankauer)
2 suction toothbrush and catheter kits (1 treated suction toothbrush, 1 Biotene mouthwash, 1 Biotene Oralbalance moisturizer, 1 untreated DenTips swab, 1 oropharyngeal catheter, 14Fr, depth marked),
8 suction swab kits (2 treated suction swabs, 1 Biotene mouthwash, 1 Biotene Oralbalance moisturizer, 1 untreated DenTips swab),
2 suction swab and catheter kits (2 treated suction swabs, 1 Biotene mouthwash, 1 Biotene Oralbalance moisturizer, 1 untreated DenTips swab, 1 oropharyngeal catheter, 14Fr, depth marked)

In the beginning of each 24 hour period, the set-up kit is used. Then 1 suction toothbrush and catheter kit is used to brush the patient’s teeth and gums, and to apply the mouth moisturizer, and the catheter is used for sub-glottal suctioning. 2 hours later, the suction swab kit is used to clean the patient’s mouth and apply the mouth moisturizer. 2 hours later, the second suction swab kit is used to clean the patient’s mouth and apply the mouth moisturizer. 2 hours later, the suction swab and catheter kit is used to perform deep suctioning, clean the patient’s mouth and apply the mouth moisturizer. 2 hours later, a suction swab kit is used to clean the patient’s mouth and apply the mouth moisturizer. 2 hours later, a suction swab kit is used to clean the patient’s mouth and apply the mouth moisturizer. Continue this process using the components in the order of packaging every two hours.

PROCEDURE
1. Set up suction equipment.
2. Discuss procedure with patient and/or family identifying purpose of oral care and goals to be achieved.
3. Raise the head of the bed or place patient in a semi-fowlers position.
4. Insert biteblock/Berman Airway
5. Deep-suction intubated patients using the oro-pharyngeal catheter as needed to remove oropharyngeal secretions from the top of the insufflation cuff, the pyriform sinuses, and the epiglottis.
6. Use the Yankauer to remove debris and copious secretions (note: the yankauer is not a “cleaning tool”, Oral hygiene is provided using the suction swab and suction toothbrush only).
7. Place mouthwash in “built-in” medicine cup. With suction “off”, place suction toothbrush in mouthwash to saturate.
8. Brush teeth gently using suction toothbrush and recommended mouth wash.
   7.1 Brush for approximately one to two minutes.
   7.2 Exert gentle pressure while moving in short horizontal or circular strokes.
   7.3 Insure foam is intact after use. If not remove any particles from oral cavity.
9. Gently brush the surface of the tongue, the teeth, and gingiva.
10. Use suction swab to clean the teeth and tongue if brushing causes discomfort or bleeding (note: gingival bleeding may occur in patients with severe periodontal disease which does not preclude the use of the suction toothbrush).
10.1 Place swab perpendicular to gum line, applying gentle mechanical action for one to two minutes.
10.2 Turn swab in clockwise rotation to remove mucous and debris. If oral cavity has especially copious debris, lightly coat oral cavity with mouth moisturizer to soften debris, wait five minutes, and continue oral care.
10.3 Use additional Dentips to remove excessive debris from the oral cavity as debris can clog vacuum lines.
10.4 Insure foam is intact after use. If not remove any particles from oral cavity.
11. Apply mouth moisturizer to the oral mucosa using the Dentip.
12. Apply non-petroleum-based lip balm if needed.
13. Flush suction equipment with sterilized water.
15. Document provision of oral care in patient chart including oral-peripheral findings, type of oral care provided, and time of intervention.
FREQUENT ORAL CARE IS IMPORTANT

Your 4 hour VAPrevent kit contains everything you need for 1 patient for a 24 hour period based on a Q4 oral care protocol:

1 setup kit (1 y-connector, 1 on/off turn-valve, 1 covered yankauer)
2 suction toothbrush and catheter kits (1 treated suction toothbrush, 1 Biotene mouthwash, 1 Biotene Oralbalance moisturizer, 1 untreated DenTips swab, 1 oropharyngeal catheter, 14Fr, depth marked),
4 suction swab kit (2 treated suction swabs, 1 Biotene mouthwash, 1 Biotene Oralbalance moisturizer, 1 untreated DenTips swab),

In the beginning of each 24 hour period, the set-up kit is used. Then 1 suction toothbrush and catheter kit is used to brush the patient’s teeth and gums, and to apply the mouth moisturizer, and the catheter is used for sub-glottal suctioning. 4 hours later, the suction toothbrush kit is used to clean the patient’s mouth and apply the mouth moisturizer. 4 hours later, the second suction swab kit is used to clean the patient’s mouth and apply the mouth moisturizer. 4 hours later, another suction toothbrush and catheter kit is used. 4 hours later (and 4 hours again after that). The 4th and 5th suction swab kits are used to clean the patient’s mouth and apply the mouth moisturizer. See detailed instructions below.

PROCEDURE

1. Set up suction equipment.
2. Discuss procedure with patient and/or family identifying purpose of oral care and goals to be achieved.
3. Raise the head of the bed or place patient in a semi-fowlers position.
4. Insert biteblock/ Berman Airway
5. Deep-suction intubated patients using the oro-pharyngeal catheter as needed to remove oropharyngeal secretions from the top of the insufflation cuff, the pyriform sinuses, and the epiglottis.
6. Use the Yankauer to remove debris and copious secretions (note: the yankauer is not a “cleaning tool”. Oral hygiene is provided using the suction swab and suction toothbrush only).
7. Place mouthwash in “built-in” medicine cup. With suction “off”, place suction toothbrush in mouthwash to saturate.
8. Brush teeth gently using suction toothbrush and recommended mouth wash.
   7.1 Brush for approximately one to two minutes.
   7.2 Exert gentle pressure while moving in short horizontal or circular strokes.
   7.3 Insure foam is intact after use. If not remove any particles from oral cavity.
9. Gently brush the surface of the tongue, the teeth, and gingiva.
10. Use suction swab to clean the teeth and tongue if brushing causes discomfort or bleeding (note: gingival bleeding may occur in patients with severe periodontal disease which does not preclude the use of the suction toothbrush).
   10.1 Place swab perpendicular to gum line, applying gentle mechanical action for one to two minutes.
   10.2 Turn swab in clockwise rotation to remove mucous and debris. If oral cavity has especially copious debris, lightly coat oral cavity with mouth moisturizer to soften debris, wait five minutes, and continue oral care.
   10.3 Use additional Dentips to remove excessive debris from the oral cavity as debris can clog vacuum lines.
   10.4 Insure foam is intact after use. If not remove any particles from oral cavity.
11. Apply mouth moisturizer to the oral mucosa using the Dentip.
12. Apply non-petroleum-based lip balm if needed.
13. Flush suction equipment with sterilized water.
15. Document provision of oral care in patient chart including oral-peripheral findings, type of oral care provided, and time of intervention.
Your 8 hour VA Prevent kit contains everything you need for 1 patient for a 24 hour period based on a Q8 oral care protocol:

1 setup kit (1 y-connector, 1 on/off turn-valve, 1 covered yankauer)
2 suction toothbrush kits (1 treated suction toothbrush, 1 Biotene mouthwash, 1 Biotene Oralbalance moisturizer, 1 untreated DenTips swab),
1 suction swab kit (2 treated suction swabs, 1 Biotene mouthwash, 1 Biotene Oralbalance moisturizer, 1 untreated DenTips swab),
1 catheter kit (1 oropharyngeal catheter, 14Fr, depth marked)

In the beginning of each 24 hour period, the set-up kit is used. Then 1 suction toothbrush kit is used to brush the patient’s teeth and gums, and to apply the mouth moisturizer, and the catheter kit is used for sub-glottal suctioning. 8 hours later, the suction swab kit is used to clean the patient’s mouth and apply the mouth moisturizer. 8 hours later, the second suction toothbrush kit is used to brush the patient’s teeth and apply the mouth moisturizer. See detailed instructions below.

PROCEDURE
1. Set up suction equipment.
2. Discuss procedure with patient and/or family identifying purpose of oral care and goals to be achieved.
3. Raise the head of the bed or place patient in a semi-fowlers position.
4. Insert biteblock/Berman Airway
5. Deep-suction intubated patients using the oro-pharyngeal catheter as needed to remove oropharyngeal secretions from the top of the insufflation cuff, the pyriform sinuses, and the epiglottis.
6. Use the Yankauer to remove debris and copious secretions (note: the yankauer is not a “cleaning tool”. Oral hygiene is provided using the suction swab and suction toothbrush only).
7. Place mouthwash in “built-in” medicine cup. With suction “off”, place suction toothbrush in mouthwash to saturate.
8. Brush teeth gently using suction toothbrush and recommended mouth wash.
   7.1 Brush for approximately one to two minutes.
   7.2 Exert gentle pressure while moving in short horizontal or circular strokes.
   7.3 Insure foam is intact after use. If not remove any particles from oral cavity.
9. Gently brush the surface of the tongue, the teeth, and gingiva.
10. Use suction swab to clean the teeth and tongue if brushing causes discomfort or bleeding (note: gingival bleeding may occur in patients with severe periodontal disease which does not preclude the use of the suction toothbrush).
   10.1 Place swab perpendicular to gum line, applying gentle mechanical action for one to two minutes.
   10.2 Turn swab in clockwise rotation to remove mucous and debris. If oral cavity has especially copious debris, lightly coat oral cavity with mouth moisturizer to soften debris, wait five minutes, and continue oral care.
   10.3 Use additional Dentips to remove excessive debris from the oral cavity as debris can clog vacuum lines.
   10.4 Insure foam is intact after use. If not remove any particles from oral cavity.
11. Apply mouth moisturizer to the oral mucosa using the Dentip.
12. Apply non-petroleum-based lip balm if needed.
13. Flush suction equipment with sterilized water.
15. Document provision of oral care in patient chart including oral-peripheral findings, type of oral care provided, and time of intervention.
Best practice protocols and Medline’s VAPrevent and Oral Care kits help safeguard your patients

The CDC recommends developing a comprehensive oral-hygiene program for patients in acute- or long-term care facilities who are at risk of developing VAP.

Medline’s ready-to-use VAPrevent Kits provide you with what is needed to help protect your patient while providing effective, efficient, and easy best practice oral care.

Available in Q2, Q4 and Q8 hour formats as well as individual components, Medline’s oral care line allows you to choose the appropriate level of intervention based on unit protocols resulting from patient assessments.

**Biotène® mouthwash and toothpaste**

- Biotène® toothpaste and mouthwash contain natural enzymes – lactoperoxidase, lactoferrin and lysozyme - which maintain natural oral flora. Sweetened with Xylitol®.*

**Oralbalance® gel**

- Oralbalance® gel is an aloe-based moisturizer with no petroleum distillates. Contains enzymes to help neutralize odors and moisten the oral cavity.*

- Mint-flavored fluoride toothpaste is extra gentle and contains salivary enzymes and Xylitol®. Biotène® products contain no sodium laurel sulfates (SLS), a known drying agent.*

*visit http://www.laclede.com/ for complete product information

**DenTips® Disposable Oral Swabs**

- Green, mint-flavored Dentifrice-treated DenTips® (containing sodium bicarbonate) and untreated (blue foam) DenTips® clean the teeth and mouth with low abrasion and inhibit plaque attachment to the teeth. Long, high-impact polystyrene handles come standard.

**SuperSoft Toothbrush**

- Incredibly soft bristles minimize discomfort during oral care in patients with sensitive gums while the easy-grip handle promotes patient independence in activities of daily living. (Also available in a pediatric version.)
Medline's VAPrevent and Oral Care kits, continued

**Treated Suction Swabs**
- Long, high-impact polystyrene handle and valve improve caregiver accessibility to the oral cavity and help prevent touch-contamination.
- MDS096513
- MDS096512
- MDS096525
- MDS096550
- MDS096612
- MDS096613

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**Treated Suction Toothbrush**
- Pediatric-sized, with a thin, molded polypropylene handle, this supersoft toothbrush and treated foam head allow gentle all-in-one oral care for patients with restricted range of motion at the jaw.
- MDS096575
- MDS096570
- MDS096571
- MDS096572
- MDS096671

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**Covered Yankauer**
- Flexible polypropylene-covered yankauer facilitates hygienic bedside storage following its use and subsequent cleansing.
- MDS096630A
- MDS096640
- MDS096650

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**Oropharyngeal Catheter, 14Fr, depth marked**
- Fully flexible and depth marked, the oropharyngeal catheter allows the caregiver to easily suction above the insufflation cuff and throughout the pharynx.
- MDS096635
<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
<th>Each/Case</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DenTips Disposable Oral Swabs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDS096502</td>
<td>DenTips, Treated with Dentifrice, Individually wrapped</td>
<td>500 Each, 1000 ea/Case</td>
</tr>
<tr>
<td>MDS096504</td>
<td>DenTips, Treated with Dentifrice</td>
<td>200 ea/Box, 500 ea/Case</td>
</tr>
<tr>
<td>MDS096508</td>
<td>DenTips, Treated with Dentifrice, Bulk</td>
<td>1000 Each, 1000 ea/Case</td>
</tr>
<tr>
<td>MDS096202</td>
<td>DenTips, Untreated, Individually Wrapped</td>
<td>500 Each, 1000 ea/Case</td>
</tr>
<tr>
<td>MDS096206</td>
<td>DenTips, Untreated</td>
<td>1000 Each, 10000 ea/Case</td>
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<tr>
<td><strong>Biotène/Accessories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DYN60420</td>
<td>Bite Block/Berman Airway, Medium, Adult 90mm, Individually wrapped</td>
<td>12 Each</td>
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<tr>
<td>MDS096081</td>
<td>Pediatric Super soft toothbrush, individually wrapped</td>
<td>72 Each</td>
</tr>
<tr>
<td>MDS096082</td>
<td>Super soft toothbrush, individually wrapped</td>
<td>72 Each</td>
</tr>
<tr>
<td>MDS096575</td>
<td>Treated Suction Toothbrush, individually wrapped</td>
<td>100 Each</td>
</tr>
<tr>
<td>MDS096525</td>
<td>Treated Suction Swab, individually wrapped</td>
<td>100 Each</td>
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<tr>
<td>MDS096065</td>
<td>Biotène Mouthwash, Alcohol-free, 2 oz. bottle</td>
<td>24 Each</td>
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<tr>
<td>MDS096160</td>
<td>Biotène Mouthwash, Alcohol-free, 16 oz. bottle</td>
<td>72 Each</td>
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<tr>
<td>MDS096083</td>
<td>Oral balance Mouth Moisturizing Gel, .5 oz tube</td>
<td>288 Each</td>
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<tr>
<td>MDS096250H</td>
<td>Oral balance Mouth Moisturizing Gel, .5 oz tube</td>
<td>1 Each</td>
</tr>
<tr>
<td>MDS096080</td>
<td>Biotène Toothpaste, Dry Mouth, .75 oz. tube</td>
<td>288 Each</td>
</tr>
<tr>
<td>MDS096650</td>
<td>Y connector and clamp for oral care</td>
<td>50 ea/Case</td>
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<tr>
<td>NON260507DIR</td>
<td>White Plastic Dispenser, wall mountable 7.25&quot; x 5.5&quot; x 5.5&quot; (holds MDS096012, MDS096013, MDS096000, MDS096570, MDS096571, MDS096550, MDS096513, MDS096504, MDS096206)</td>
<td>1 ea</td>
</tr>
<tr>
<td><strong>Oral Care Kits with Biotène</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDS096000</td>
<td>Oral Care Kit, Extended Care - Contains 20 Treated DenTips (Individually Wrapped), 2 oz. Biotène mouthwash, 1 Oz. Medicine Cup, .5 Oz. Oral balance Mouth Moisturizing Gel, packaged in Resealable Bag</td>
<td>50 Each</td>
</tr>
<tr>
<td>MDS096013</td>
<td>Oral Care Kit, Standard - 2 treated DenTips swabs, 1 Biotène mouthwash (.33 oz.), 1 Oral balance Mouth Moisturizing Gel (3 gram)</td>
<td>100 Each</td>
</tr>
<tr>
<td>MDS096012</td>
<td>Oral Care Kit, Economy - 2 treated DenTips swabs, 1 Biotène mouthwash (.33 oz.)</td>
<td>100 Each</td>
</tr>
<tr>
<td><strong>Suction Swab Kits with Biotène</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDS096512</td>
<td>Suction Swab Kit, Standard - 2 treated suction swabs, 1 Biotène mouthwash (.33 oz.), 1 DenTips swab</td>
<td>100 Each</td>
</tr>
<tr>
<td>MDS096513</td>
<td>Suction Swab Kit, Standard - 2 treated suction swabs, 1 Biotène mouthwash (.33 oz.), 1 Oral balance Mouth Moisturizing Gel (3 gram), 1 DenTips swab (untreated)</td>
<td>100 Each</td>
</tr>
<tr>
<td>MDS096550</td>
<td>Suction Swab Kit, Extended Care - 12 treated suction swabs (individually wrapped), 10 untreated DenTips disposed oral swab (untreated), 2 oz. Biotène mouthwash, .5 oz. Oral balance Mouth Moisturizing Gel, 15 medicine cups (1 oz.)</td>
<td>50 Each</td>
</tr>
<tr>
<td><strong>Suction Toothbrush Kits with Biotène</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDS096570</td>
<td>Suction Toothbrush Kit, Standard - 2 treated suction toothbrushes, 1 Biotène mouthwash (.33 oz.)</td>
<td>100 Each</td>
</tr>
<tr>
<td>MDS096571</td>
<td>Suction Toothbrush Kit, Economy - 1 treated suction toothbrush, 1 Biotène mouthwash (.33 oz.)</td>
<td>100 Each</td>
</tr>
<tr>
<td>MDS096572</td>
<td>Suction Toothbrush Kit, Deluxe - 1 treated suction toothbrush, 1 Biotène Mouthwash (.33 oz.), 1 DenTips disposable oral swab (untreated), 1 Biotène Oral balance Mouth Moisturizing Gel (3 gram)</td>
<td>100 Each</td>
</tr>
</tbody>
</table>
## VA Prevent Kits with Biotène

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Includes</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDS096802</td>
<td>VA Prevent Kit with Biotène and Oralbalance (2 hrs.) - 2 suction toothbrush kits, 10 suction swab kits, 1 setup kit (covered yankauer, y-connector, on-off valve), 4 oropharyngeal catheters included in kits</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>MDS096804</td>
<td>VA Prevent Kit with Biotène and Oralbalance (4 hrs.) - 2 suction toothbrush kits, 4 suction swab kits, 1 setup kit (covered yankauer, y-connector, on-off valve), 2 catheter oropharyngeal catheters included in kits</td>
<td></td>
<td>15</td>
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<tr>
<td>MDS096808</td>
<td>VA Prevent Kit with Biotène and Oralbalance (8 hrs.) - 2 suction toothbrush kits, 1 suction swab kit, 1 setup kit (covered yankauer, y-connector, on-off valve), 1 oropharyngeal catheter included in kit</td>
<td></td>
<td>30</td>
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</tbody>
</table>

## VA Prevent Kit Components

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Includes</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDS096613</td>
<td>Suction Swab Kit (VA Prevent) - 2 treated suction swabs (straight valve), 1 Biotène mouthwash (.33 oz.), 1 Biotène Oralbalance moisturizer (3 gram), 1 DenTips swab (untreated)</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>MDS096630A</td>
<td>Setup Kit (VA Prevent) - 1 y-connector, 1 on/off turn-valve, 1 covered yankauer</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>MDS096635</td>
<td>Catheter Kit (VA Prevent) - 1 oropharyngeal catheter, 14 Fr, depth marked</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>MDS096671</td>
<td>Suction Toothbrush Kit (VA Prevent) - 1 treated suction toothbrush (straight valve), 1 Biotène mouthwash (.33 oz.), 1 Oralbalance Mouth Moisturizing Gel (3 gram), 1 DenTips swab (untreated)</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>MDS096650</td>
<td>Covered Yankauer with on-off valve</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>MDS096640</td>
<td>Covered Yankauer</td>
<td></td>
<td>60</td>
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</tbody>
</table>

## Other Oral Care Products

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPKS63925</td>
<td>Saliswabs - Oral Hygiene Swabs (black currant flavor); Alternative to lemon-glycerin swabs</td>
<td>250 packs/ca</td>
</tr>
</tbody>
</table>
ACHIEVING EXCELLENCE IN PATIENT CARE

GOAL: Preventing ventilator-associated pneumonia

FOCUS: Comprehensive oral hygiene in combination with the ventilator bundle

Comprehensive oral hygiene for the prevention or modulation of oropharyngeal colonization:

• Oropharyngeal cleaning
• Decontamination

Ventilator Bundle:

• Head of bed elevated
• Daily assessment
• PUD prophylaxis
• DVT prophylaxis

• VAP is an important source of morbidity and mortality in critically ill and postoperative patients receiving mechanical ventilation. The hospital mortality rate of ventilator patients who develop VAP is 46 percent, compared to 32 percent for ventilator patients who do not develop VAP.
• VAP occurs in up to 15 percent of patients receiving mechanical ventilation.
• VAP is associated with prolongation of mechanical ventilation, ICU and hospital stay and associated increases in costs.

TARGETED BY PATIENT CARE INITIATIVES
The CDC has developed evidenced-based guidelines for the prevention of VAP, which includes comprehensive oral hygiene.

The Institute for Healthcare Improvement’s 100,000 Lives Campaign names prevention of VAP as one of six changes for improving care.

The Joint Commission on Accreditation of Healthcare Organizations has included reducing the risk of healthcare-associated infections, including VAP, in its 2007 National Patient Safety Goals.

Prevention of VAP is a component of the Surgical Care Improvement Project (SCIP).

The Institute for Healthcare Improvement’s 5 Million Lives campaign has incorporated SCIP’s four target areas for improving surgical care, which includes prevention of VAP. The Institute of Medicine has identified the prevention of nosocomial infections, including VAP, as a priority for national action.

A PLAN FOR PREVENTION
Implementation of a comprehensive oral hygiene program for patients at risk for hospital-acquired pneumonias, including VAP.

Implementation of a set of evidence-based interventions, together referred to as the ventilator bundle, to reduce the occurrence of ventilator-associated pneumonia.

References
The role of comprehensive oral hygiene in prevention of ventilator-associated pneumonia:

A comprehensive oral hygiene program that includes routine oropharyngeal cleaning and decontamination is supported by research and recommended by current patient care initiatives.

- CDC guidelines recommend prevention or modulation of oropharyngeal colonization and that oropharyngeal cleaning and decontamination be part of a comprehensive oral hygiene program.
- One study of critically ill patients showed that a comprehensive oral care program of brushing, swabbing and suctioning bacteria from the mouth to decontaminate helped to reduce the incidence of VAP from 5.6 VAPs per 1,000 ventilator days to 2.2 per 1,000 ventilator days.

Medline’s ready-to-use VAPrevent kits establish a comprehensive oral hygiene program that makes it effective, efficient, and easy to achieve compliance.

Compliance is Key:
Patient assessment includes the need for oral care every two to four hours for patients who are critically ill and require ventilator support.

Q2 Hour Kit:
Contains everything you need for one patient for a 24-hour period when patient assessment indicates moderate/severe oral cavity dysfunction requiring Q2 oral care.
Q4 Hour Kit:
Contains everything you need for one patient for a 24-hour period when patient assessment indicates mild to moderate oral cavity dysfunction requiring Q4 oral care.

Q8 Hour Kit:
Contains everything you need for one patient for a 24-hour period when patient assessment indicates the oral cavity is within functional limits but the patient remains at risk for VAP or other aspiration pneumonias, or when ventilator support is no longer required.
VENTILATOR PATIENTS ARE NOT ALONE IN NEEDING GOOD ORAL CARE

Other important diagnostic categories or considerations include:

Critically ill patients
Natural defenses may be impaired in these patients in combination with medication induced xerostomia.

Neurology, stroke, & brain injury
These patients routinely demonstrate deficits due to hemiplegia, paresthesias, and dyscoordination. A comprehensive oral care program in combination with dysphagia treatment can substantially decrease the possibility of aspiration pneumonia.

Head and neck cancer patients
Radiation therapy reduces the body’s production of saliva. Replacing naturally occurring enzymes improves the patient’s quality of life by eliminating the effects of xerostomia.

Chronic Obstructive Pulmonary Disease (COPD)
Patients with COPD are often found to be “mouth breathers”. This increases their likelihood of xerostomia and impacts the balance of salivary enzymes in the oral cavity. As well, because of the frequently observed dyscoordination between breathing and swallowing, these patients are at greater risk of developing aspiration pneumonia.

Dementia
In the latter stages of dementia, feeding and swallowing can be impaired due to fluctuating and/or deteriorating cognitive status. These patients are at risk for healthcare associated pneumonias.

Dysphagia (swallowing disorders)
For a variety of reasons, a patient may have impaired swallowing which may cause aspiration pneumonia. These deficits dramatically impact the patient’s ability to safely swallow (dysphagia) and may cause a secondary diagnosis of aspiration pneumonia.
Medline’s VAPrevent & Oral Care Kits:
Reducing the Risk of Ventilator-Associated Pneumonia


1-800-MEDLINE (633-5463)
www.medline.com

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www.medline.ca canada@medline.com